

## **High Voltage Series**

TE Circuit Protection 8mm 2Pole high voltage GDTs (ceramic gas discharge tubes), are commonly used to help protect high voltage circuits.

TE Circuit Protection high voltage GDTs offer a high level of surge protection, low capacitance and a broad array of break over voltage levels, making them suitable for applications such as branch circuits, medical electronics and surge protection on power lines. TE Circuit Protection GDTs can help equipment meet the most stringent regulatory standards.



#### **Benefits:**

Helps provide overvoltage fault protection
against high energy surges

#### Features:

- 2Pole, 8mm Axial and non Leaded devices
- Broad voltage range from 800-4000V
- Low capacitance
- Crowbar overvoltage protection
- UL 1449 recognized
- RoHS compliant
- Non-radioactive materials
- Capable up to 10kA 8/20 µs surge

#### **Applications:**

- Power Supplies
- Commercial Installations
- Medical Electronics
- Industrial Equipment and Machinery
- Appliance (Hi-Pot)

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### Device Voltage Ratings, Surge Rating, Capacitance, Insulation Resistance, UL

TE Part Description	DC Sparkover	Impulse Sparkover	Insulation Resistance	Capacitance	Impulse Discharge Current, 8/20us		AC Discharge Current, 50 Hz		UL Rating
	± 20% @100V/s (V)	100 V/μs (V)	500Vdc (MΩ)	1MHz (pF)	10 hits	1 hit	10 hits, 1S	1 hit, 9 cycles	UL1449 #E332226
GTCX28-801M-R05	800	1400	≥ 10,000	≤1	5kA	10kA	5A	N/A	All Devices
GTCX28-102M-R03	1000	1700	≥ 10,000	≤1	3KA	10kA	1A	5A	All Devices
GTCX28-122M-R03	1200	1900	≥ 10,000	≤1	3KA	10kA	1A	5A	All Devices
GTCX28-152L-R03	1500(± 15%)	2200	≥ 10,000	≤1	3KA	10kA	1A	5A	All Devices
GTCX28-212M-R03	2100	2700	≥ 10,000	≤1	3KA	10kA	1A	5A	All Devices
GTCX28-242M-R03	2400	3300	≥ 10,000	≤1	3KA	10kA	1A	5A	All Devices
GTCX28-252M-R03	2500	3500	≥ 10,000	≤1	3KA	10kA	1A	5A	All Devices
GTCX28-272L-R03	2700 (± 15%)	3700	≥ 10,000	≤1	3KA	10kA	1A	5A	All Devices
GTCX28-302M-R03	3000	4000	≥ 10,000	≤1	3KA	10kA	1A	5A	All Devices
GTCX28-312L-R03	3100 (± 15%)	4300	≥ 10,000	≤1	3KA	10kA	1A	5A	All Devices
GTCX28-362M-R03	3600	4600	≥ 10,000	≤1	3KA	10kA	1A	5A	All Devices
GTCX28-402M-R03	4000	5000	≥ 10,000	≤1	3KA	10kA	1A	5A	All Devices

### **Product Dimensions:**





#### **DIMENSIONS = MILLIMETERS [INCHES]**

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#### No Leads (GTCN28-XXXX-R0X)



Document: SCD28143 Status: Released Rev: A Date: AUGUST 25, 2011



### **High Voltage Series General Characteristics:** No Radioactive Materials Storage temperature: -40°C ... +90°C -40°C ... +90°C Operating temperature: Electrode: Fe-Ni alloy, Ni plated Lead wire: **Tin Plated Copper Materials Information ROHS Compliant ELV Compliant** Pb-Free Directive 2002/95/EC Directive 2000/53/EC Compliant Compliant **Packaging Information**

#### **Part Description**

Axial Leads: GTCA28-XXXX-R0X No Leads: GTCN28-XXXM-R0X

Tray / Reel	Standard Package
100	1000
100	2000

#### Part Numbering System

#### Example Part Number: GTCA28-212M-R03

- GT = Gas Tube
- C = Ceramic
- A = A= Axial Leads
- 2 = 2 Electrode device
- 8 = 8mm Diameter
- 212= DC Spark Over Voltage of 2100V (at 100V/s)
- M = Tolerance of 20% on DC Spark Over Voltage
- R = Product Family Designator
- 03 = Surge rating: 8x20Es 3kA 10 times

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#### Part Marking Reference

### Example Part Marking: X 212 R03 HB

<b>X</b> =	Manufacturer' Mark
212 =	Voltage Designator (212 = 2100V)
R03 =	Product Family Designator - Surge Current 3kA (8x20µs 10 hits)
HB =	Year and Week of Manufacture

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